

WHAT IS CLAIMED IS:

1. A storage subsystem including a first storage subsystem connected to a plurality of host computers via a first interface and a second storage subsystem connected to said first storage subsystem via a second interface so as to copy write data written in said first storage subsystem from said host computer onto said second storage subsystem from said first storage subsystem, thereby protecting the write data in said first and said second storage subsystems in a multiplex manner, said storage subsystem comprising:  
  
a storage control unit provided in said first storage subsystem and having a first threshold for controlling for each of said host computers an occupancy ratio of the write data whose copy to said second storage subsystem is incomplete in a data buffer in said first storage subsystem, and control logic for delaying the processing of a data write request from each of said host computers on the basis of said first threshold which is set for each of said host computers.
2. The storage subsystem according to claim 1, wherein the control logic stored in said storage control unit causes the processing of the data write request from said host computer to be delayed when the occupancy ratio of the write data whose copy to said second storage subsystem is incomplete in the data buffer in said first storage subsystem has reached said first threshold.

3. The storage subsystem according to claim 1, wherein said storage control unit of said first storage subsystem further has a second threshold for controlling an occupancy ratio of an aggregate total of the write data whose copy to said second storage subsystem is incomplete in the data buffer by said plurality of host computers, and said control logic further has control logic for controlling a start of the operation for delaying the processing of the data write request from said host computer in accordance with said first threshold, on the basis of said second threshold.

4. The storage subsystem according to claim 3, wherein said control logic for controlling the start of the operation causes the processing of the write request on the basis of said first threshold to be delayed when the aggregate total of the write data whose copy to said second storage subsystem is incomplete has reached said second threshold.

5. The storage subsystem according to claim 1, wherein said first interface consists of at least one of a mainframe-system host interface and an open-system host interface, and said second interface consists of a fibre channel.

6. A method of controlling a storage subsystem including a first storage subsystem connected to a plurality of host computers via a first interface and a second storage subsystem connected to said first

storage subsystem via a second interface so as to copy write data written in said first storage subsystem from said host computer onto said second storage subsystem from said first storage subsystem, thereby protecting the write data in said first and said second storage subsystems in a multiplex manner, said method comprising:

a first step of setting for each of said host computers a first threshold for controlling an occupancy ratio of the write data whose copy to said second storage subsystem is incomplete in a data buffer in said first storage subsystem; and

a second step of delaying the processing of a data write request from each of said host computers on the basis of said first threshold which is set for each of said host computers.

7. The method for controlling a storage subsystem according to claim 6, wherein in the second step for delaying the processing of the data write request, the processing of the data write request from said host computer is delayed when the occupancy ratio of the write data whose copy to said second storage subsystem is incomplete in the data buffer in said first storage subsystem has reached said first threshold.

8. The method of controlling a storage subsystem according to claim 6, wherein in the first step, the operation for setting a second threshold is effected

for controlling an occupancy ratio of an aggregate total of the write data whose copy to said second storage subsystem is incomplete in the data buffer by said plurality of host computers, and in the second step, control is effected of a start of the operation for delaying the processing of the data write request from said host computer in accordance with said first threshold, on the basis of said second threshold.

9. The method of controlling a storage subsystem according to claim 8, wherein in the control of the start of the operation in the second step, the processing of the write request on the basis of said first threshold is delayed when the aggregate total of the write data whose copy to said second storage subsystem is incomplete has reached said second threshold.